AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (Withdrawn): An isolated polypeptide having an amino acid sequence set forth in SEQ ID NO: 14.

Claim 2 (Withdrawn): An isolated polynucleotide having

(a)   a nucleotide sequence encoding the polypeptide of Claim 1, or

(b)   a nucleotide sequence complementary to the nucleotide sequence (a).

Claim 3 (Withdrawn): The polynucleotide of Claim 2, which has a nucleotide sequence set forth in SEQ ID NO: 15.

Claim 4 (Withdrawn): A recombinant vector comprising the polynucleotide of Claim 2.

Claim 5 (Withdrawn): The recombinant vector of Claim 4, which has a nucleotide sequence set forth in SEQ ID NO: 15.

Claim 6 (Withdrawn): A Cell comprising the recombinant vector of Claim 4.

Claim 7 (Withdrawn): A method for producing a plant sensitive to light signal

transduction, comprising the steps of:

(a)   inserting a polynucleotide encoding the polypeptide having an amino

acid sequence set forth in SEQ ID NO: 4 or 14 into an expression vector; and

(b)   introducing the expression vector into a plant.

Claim 8 (Withdrawn): A transgenic plant produced by the method of Claim 7.

Claim 9 (Withdrawn): A plant tissue or seed derived from the plant of Claim

8.

Claim 10 (Original): A method for producing a dwarf plant, comprising the

steps of:

(a)   inserting a polynucleotide encoding the sequence of amino acids 1-138

of SEQ ID NO: 4 into an expression vector; and

(b)   introducing the expression vector into a plant.

Claim 11 (Currently Amended): The method of Claim 10, wherein the plant

exhibits at least one phenotypic trait selected from the group consisting of shorter

height, multiple shoots and <u>dwarfing of</u> floral shoot internodes, as compared to <u>a</u>

wild-type plant.

Claim 12 (Original): A transgenic plant produced by the method of Claim 10.

Claim 13 (Currently Amended): A plant tissue or seed derived from the

transgenic plant of Claim ~~11~~ 12, wherein the plant tissue or seed comprises a polynucleotide encoding the sequence of amino acids 1-138 of SEQ ID NO: 4.

Claim 14 (Withdrawn): The plant of Claim 8, wherein the plant is a dicotyledonous plant or a monocotyledonous plant.

Claim 15 (Withdrawn): A method of identifying a phytochrome signal transduction-associated substance using the polypeptide of Claim 1 or a polynucleotide encoding the polypeptide.

Claim 16 (Withdrawn): A method of identifying a plant dwarfism-causing substance using a polypeptide having the sequence of amino acids 1-138 of SEQ ID NO: 4 or a polynucleotide encoding the polypeptide.

Claim 17 (Withdrawn): The method of Claim 15, wherein the method is performed by at least one selected from the group consisting of cDNA library screening, BAC (bacterial artificial chromosome) screening, DNA chips, protein chips, polymerase chain reaction (PCR), Northern blot, Southern blot, Western blot, enzyme-linked immunosorbent assay (ELISA), 2-D gel analysis, yeast 2-hybrid system, and *in vitro* binding assay.

Claim 18 (Withdrawn): A method for producing a protein having phosphatase activity, comprising the steps of:

(a)   inserting a polynucleotide encoding the polypeptide of Claim 1 into an expression vector;

(b)   introducing the expression vector into a cell;

(c)   culturing the cell to express the polynucleotide; and

(d)   collecting the expressed protein from the cell culture.

Claim 19 (Previously Presented): The plant of Claim 12, wherein the plant is a dicotyledonous plant or a monocotyledonous plant.

Claim 20 (Withdrawn): The method of Claim 16, wherein the method is performed by at least one selected from the group consisting of cDNA library screening, BAC (bacterial artificial chromosome) screening, DNA chips, protein chips, polymerase chain reaction (PCR), Northern blot, Southern blot, Western blot, enzyme-linked immunosorbent assay (ELISA), 2-D gel analysis, yeast 2-hybrid system, and *in vitro* binding assay.